

AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to FIG. 3. FIG. 3 has been renamed as FIG. 3a and a new drawing containing FIG. 3b has been added. Specifically, FIG. 3b is a duplicate of FIG. 3a with reference numerals “44a” and “46” being interchanged to specifically show the features in claim 26.

Attachment: Replacement Sheets

REMARKS / ARGUMENTS

Comments on Amendment to Claim 1

Applicant submits that claim 1 is amended in accordance with the following response to the objections of Examiner in the Office Action.

Applicant submits that the statement “and each of the plurality of pillars being elongated in shape” has been added to claim 1. Support for this statement is found in line 10 paragraph 2 of page 7 of the detailed description of the application.

Comments on Election/Restrictions

Applicant elected Species II with traverse in the response filed September 6, 2005. However, Examiner explains in the Office Action that the restriction requirement of July 7, 2005 is deemed proper and therefore made Final. Applicant acknowledges Examiner’s restriction requirement.

Examiner also explains that based on FIG. 3 of the application, claim 27 does not read on Species II and therefore has been withdrawn from consideration. Applicant acknowledges the withdrawal of claim 27 from consideration by Examiner.

Comments on Drawings

Examiner explains in the Office Action that the combined structure of claim 15 with claim 1 and claim 16 with claim 1, and the features of claim 26 must be shown in the drawings or cancelled from the claim.

Applicant respectfully submits that both claim 15 and claim 16 have been deleted. Applicant further submits that FIG. 3 has been renamed as FIG. 3a and that a new drawing containing FIG. 3b has been added. Specifically, FIG. 3b is a duplicate of FIG. 3a with reference numerals “44a” and “46” being interchanged to specifically show the features in claim 26.

Applicant submits that no new matter has been added.

Comments on Specification

Examiner reminds Applicant that the Abstract should be in a narrative form, be within a range of 50 to 150 words and avoid legal phraseology.

Applicant respectfully submits that the Abstract as filed does not contain legal phraseology and is written in a narrative form. However, Applicant agrees that the abstract as filed exceeds the advised range and has amended the Abstract to fall within the 50 to 150 words range.

Applicant submits that no new matter has been added.

Rejection to Claims 15, 16 and 22 under 35 USC § 112

Examiner rejects claims 15, 16 and 22 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, Examiner explains that the phrase “the antenna pattern” in line 2 of claim 22 lacks antecedent basis.

Response to Rejections to Claims 15, 16 and 22 under 35 USC § 112

Applicant respectfully submits that both claim 15 and claim 16 have been canceled. Applicant further submits that the phrase in question “the antenna pattern” in claim 22 has been amended to read “the first antenna pattern” for providing antecedence thereto. Amended claim 22 now describes the first antenna pattern and the second antenna pattern as being formed on two outwardly opposing faces of the substrate in accordance with FIG. 3 and Paragraph 2 of Page 7 of Applicant’s application.

In accordance with the above response and submitted amendments, Applicant respectfully request reconsideration and withdrawal of the rejections to claim under 35 USC § 112.

Rejections to Claims 1-11 and 21-26 under 35 USC § 102

Examiner explains that claims 1-11 and 21-26 are rejected under 35 USC § 102(b) as being anticipated United States Patent No. 6,421,013 (Chung). Examiner further explains that claims 1, 2, 15, 16, 21 and 26 are rejected under 35 USC § 102 (e) as being anticipated by United States Patent No. 6,634,564 (Kuramochi).

Response to Rejections to Claims 1, 21 and-26 under 35 USC § 102

Applicant submits that amended claims 1, 21 and 26 overcome the rejections under 35 USC § 102(b) and rejections under 35 USC § 102(e).

Applicant submits that each of claims 1, 21 and 26 as originally filed, describes a plurality of pillars extending between a first semiconductor chip to a substrate for structurally intercoupling and spatially interdisplacing the first semiconductor chip and the substrate. However, Examiner finds that the pillars of claims 1, 21 and 26 are the same as elements 42 and 44 (contacts) in Chung and elements 112a and 112b (protruding terminals) in Kuramochi.

Applicant respectfully submits that the word “pillar” not only describes a structural element but also provides a proportional restriction to the dimension of the structural element. The American Heritage Dictionary of the English Language - 4th Ed. (Dictionary 1) defines “pillar” as “a slender, freestanding, vertical support.” Therefore, each of the plurality of pillars as described in each of claims 1, 21 and 26 has a width that is proportionally much smaller than its height (i.e. slender or longitudinal).

However, for further clarity and emphasis, each of claims 1, 21 and 26 has been amended to include the phrase “and each of the plurality of pillars is elongated in shape.” Support for the amendment can be found in lines 9-11 of page 6 of Applicant’s application.

Applicant respectfully submits that neither Chung nor Kuramochi describes use of pillars as interconnecting structures. Specifically, Examiner-identified elements 42 and 44 in Chung are described as contacts in the specification and shown in FIG. 3 as art-typical contact pads. Neither the drawings nor the specification of Chung describes the contacts as pillars or structures that are elongated (i.e. slender in proportion to height).

Specifically, Examiner-identified elements 112a and 112b in Kuramochi are described as protruding terminals in the specification. The Larousse Dictionary of Science and Technology (Dictionary 2) defines “terminal” as “a point in an electrical circuit at which any electrical element may be connected.” Dictionary 1 defines “protruding” as “to jut out” or being synonymous with the word “bulge.” So the term protruding terminal only describes an art-typical contact pad which forms a bilge over the substrate as shown in FIG. 4B of Kuramochi. Neither the specification nor the drawings of Kuramochi describes the protruding terminals as pillars or structures that are elongated (i.e. slender in proportion to height).

Furthermore, neither Chung nor Kuramochi discloses that the drawings are to scale, and is silent as to dimensions and proportions of the contacts and protruding terminals respectively. Thus, no information of substantive value directly referring to or intimating the dimensions and proportion of the contacts and protruding terminals of respectively Chung’s drawings and its description, and Kuramochi’s drawings and its description may be gathered. MPEP § 2125; *see Hockerson-Halberstadt, Inc. v. Avia Group Int’l*, 222 F.3d 951, 956 55 USPQ2d 1487, 1491 (Fed. Cir. 2000) (The disclosure gave no indication that the drawings were drawn to scale. “It is well established that patent

drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.”).

In accordance with the above response and amendments, reconsideration and withdrawal of rejections to claims 1, 21 and 26 under 35 USC § 102 (b) and under 35 USC § 102 (e) are respectfully requested.

Response to Rejections to Claims 2-11 and 22-25 under 35 USC § 102

Each of claims 2-11 is dependent directly or indirectly on claim 1 while each of claims 22-25 is dependent directly or indirectly on claim 22. Therefore, when amended claim 1 and amended claim 21 are not anticipated by Chung or Kuramochi, each of claims 2-11, being further restrictions on amended claim 1 and each of claims 22-25, being further restrictions on amended claim 21, is consequently not anticipated by Chung and Kuramochi.

In accordance with the above response, reconsideration and withdrawal of rejections to claims 2-11 and 22-25 under 35 USC § 102 (b) and under 35 USC § 102 (e) are respectfully requested.

Conclusion

Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. Applicants believe a three month extension of time is needed and thus petition for such an time extension. Please charge to Conley Rose, P.C.’s Deposit Account Number 03-2769/2085-01300 for all appropriate fees.

Respectfully submitted,



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